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DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
Washington, DC 20314-1000

ETL 1110-3-502

Technical Letter
No. 1110-3-502

1 March 2000

EXPIRES 31 MARCH 2005
Engineering and Design
TELEPHONE AND NETWORK DISTRIBUTION SYSTEM
DESIGN AND IMPLEMENTATION GUIDE

1. Purpose. This engineer technical letter (ETL) provides guidance for the design and implementation of inside and outside plant signal distribution systems for telephone and data networks.
2. Applicability. This ETL applies to all HQUSACE elements and USACE commands executing projects on Army installations.
3. Distribution. Approved for public release; distribution is unlimited.
4. References. ER 1110-345-100, "Design Policy for Military Construction".
5. Background. Most projects include signal distribution systems for both telephones and data networks. The Information Systems Engineering Command, Ft. Detrick Engineering Office (ISEC-FDEO) is responsible for Army communications systems. The Corps of Engineers is responsible for ensuring communications system design in projects on Army installations comply with ISEC-FDEO requirements.
- 6 Guidance. To assure that the telephone and data network signal distribution systems are designed in accordance with Army policy and meet the customers needs, the following procedures must be followed:
 - a. The enclosed "Installation Information Infrastructure Architecture (I3A) Design and Implementation Guide" shall be used as the basis for designing both the premises distribution system (inside plant) and outside plant cable distribution system for all new and renovated projects. Although the I3A Guide also has design guidance for telephone switches and network architecture, those portions of the guide are not applicable to USACE, because network hardware and telephone switch procurement or expansion is not normally included in the USACE construction contract on Army installations.
 - b. The ISEC-FDEO is available for design review at no cost to the Army project. All design submittals must be forwarded to USAISEC-FDEO, ATTN: AMSEL-IE-DE-IN-CO, 1435 Porter Street, Suite 200, Ft. Detrick, MD 217702-5047, for review with comments. They are also available at no cost to provide guidance and assistance during the entire project acquisition process, including planning, design, construction, and testing.

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c. The proper design, integration, and implementation of the voice and data signal distribution system requires a coordinated effort between the USACE project delivery team, the MACOM DCSIM, the customer, the local installation DOIM, and USAISEC-FDEO. To assure that all interested parties are involved in this process, a written agreement that clearly states and defines the responsibilities and functions of all involved organizations must be included in the project management plan.


d. For projects designed by AE firms that have large, complex, or sophisticated information system requirements, assure that the AE has communication specialists on their staff or is required to secure the services of a qualified consultant or communications design firm.

7. Implementation. This letter will have routine application as defined in paragraph 8c, ER 1110-345-100.

FOR THE COMMANDER:

1 Appendix

APP A - Installation Information
Infrastructure Architecture
(I3A) Design and Implementation
Guide


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